



Express Mail No.: EL 501 759 272 US

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of: Palese et al.

Confirmation No.: 7446

Application No.: 09/724,427

Art Unit: 1636

Filed: November 28, 2001

Examiner: McKelvey, Terry. A.

For: RECOMBINANT NEGATIVE STRAND
RNA VIRUS EXPRESSION SYSTEMS AND
VACCINES

Atty Docket No.: 7682-053-999

RECEIVED
APR 29 2003
TECH CENTER 1600/2900

**TRANSMITTAL OF SUBSTITUTE SEQUENCE LISTING AND STATEMENTS
UNDER 37 C.F.R. § 1.825(a) AND (b)**

Assistant Commissioner for Patents
Washington, D.C. 20231

Dear Sir:

In response to the Notice to Comply with Requirements for Patent Applications Containing Nucleotide Sequence and/or Amino Acid Sequence Disclosures ("Notice to Comply") mailed January 24, 2003, Applicants submit herewith copies of a Substitute Sequence Listing in paper and computer readable forms (2 copies), to correct the deficiencies of the Sequence Listing.

Applicants have amended SEQ ID NO:62 to correct an inadvertent error that occurred during the preparation of the Sequence Listing. SEQ ID NO:62 has been corrected to correspond to the sequence shown on lines 5-11 at page 73 as oligo2 of the application as originally filed.

Applicants submit herewith a statement that the paper and computer-readable copies of the Substitute Sequence Listing, submitted in accordance with 37 C.F.R. § 1.825 on even date herewith, are the same. Applicants also submit a statement that the two computer-readable copies are identical. Applicants further submit herewith a statement that the paper and computer-readable copies of the Substitute Sequence Listing, submitted in accordance with 37 C.F.R. § 1.825 on even date herewith, do not include new matter. Accordingly, Applicants respectfully request that the Substitute Sequence Listing be entered in the instant application.

Respectfully submitted,

by: *Jacqueline Benn*
Reg No. 43,492

Date: April 23, 2003

Laura A. Coruzzi

Laura A. Coruzzi 30,742
PENNIE & EDMONDS LLP (Reg. No)
1155 Avenue of the Americas
New York, N.Y. 10036-2711
(212) 790-9090



SEQUENCE LISTING

amdtc

RECEIVED

APR 29 2003

TECH CENTER 1600/2900

<110> Palese, Peter
Garcia-Sastre, Adolfo

<120> RECOMBINANT NEGATIVE STRAND RNA VIRUS EXPRESSION SYSTEMS AND
VACCINES

<130> 7682-053-999

<140> 09/724,427

<141> 2000-11-28

<150> 09/396,539

<151> 1999-09-14

<160> 63

<170> PatentIn version 3.0

<210> 1

<211> 21

<212> DNA

<213> Influenza virus

<400> 1

tacgaggaaa tgttctgtt a

21

<210> 2

<211> 19

<212> PRT

<213> Influenza virus

<400> 2

Gln Leu Val Trp Met Ala Cys Asn Ser Ala Ala Phe Glu Asp Leu Arg

1

5

10

15

Val Leu Ser

<210> 3

<211> 16

<212> PRT

<213> Influenza virus

<400> 3

Thr Tyr Gln Arg Thr Arg Gln Leu Val Arg Leu Thr Gly Met Asp Pro

1

5

10

15

<210> 4

<211> 95

<212> DNA

<213> Influenza virus

<400> 4

gaagcttaaat acgactcact ataagtagaa acaaggggtgt tttttcatat catttaaact
tcaccctgct tttgctgaat tcattcttct gcagg

60

95

<210> 5

<211> 95

<212> DNA

<213> Influenza virus

<400> 5
 gaagcttaat acgactcact ataagcaaaa gcagggtgaa gtttaaata ga tatgaaaaaa 60
 cacccttggt tctactgaat tcattcttct gcagg 95

 <210> 6
 <211> 68
 <212> DNA
 <213> Influenza virus

 <400> 6
 agcttaataac gactcactat aagatctatt aaacttcacc ctgcttttgc tgaattcatt 60
 cttctgca 68

 <210> 7
 <211> 60
 <212> DNA
 <213> Influenza virus

 <400> 7
 gaagaatgaa ttcagcaaaa gcagggtgaa gtttaataga tcttatagtg agtcgtatta 60

 <210> 8
 <211> 42
 <212> DNA
 <213> Influenza virus

 <400> 8
 ccgaattctt aatagcactc actataagta gaaacaaggg tg 42

 <210> 9
 <211> 30
 <212> DNA
 <213> Influenza virus

 <400> 9
 cctctagacg ctcgagagca aaagcaggtg 30

 <210> 10
 <211> 15
 <212> RNA
 <213> Influenza virus

 <400> 10
 caccugcuu uugcu 15

 <210> 11
 <211> 15
 <212> RNA
 <213> Influenza virus

 <400> 11
 caccugcuu uuacu 15

 <210> 12
 <211> 15
 <212> RNA
 <213> Influenza virus

 <400> 12
 caccugcuu cugcu 15

<210>	13	
<211>	15	
<212>	RNA	
<213>	Influenza virus	
<400>	13	
cacccuguuu	uugcu	15
<210>	14	
<211>	16	
<212>	RNA	
<213>	Influenza virus	
<400>	14	
cacccuugcu	uuugcu	16
<210>	15	
<211>	15	
<212>	RNA	
<213>	Influenza virus	
<400>	15	
cacccuguuu	uuacu	15
<210>	16	
<211>	15	
<212>	RNA	
<213>	Influenza virus	
<400>	16	
cacccuguuu	cugcu	15
<210>	17	
<211>	16	
<212>	RNA	
<213>	Influenza virus	
<400>	17	
cacccuugcu	uuuacu	16
<210>	18	
<211>	16	
<212>	RNA	
<213>	Influenza virus	
<400>	18	
cacccuuguu	uuuacu	16
<210>	19	
<211>	16	
<212>	RNA	
<213>	Influenza virus	
<400>	19	
cacccuuguu	ucuacu	16
<210>	20	
<211>	96	
<212>	DNA	

<213> Influenza virus

<400> 20

ctagacgccc tgcagcaaaa gcagggtgac aaagacataa tggagaaaaa aatcactggg 60
tataccaccg ttgatatatc ccaatcgcat cgtaaa 96

<210> 21

<211> 96

<212> DNA

<213> Influenza virus

<400> 21

gttctttacg atgcgattgg gatatatcaa cggtggtata cccagtgatt tttttctcca 60
ttatgtcttt gtcaccctgc ttttgctgca gggcgt 96

<210> 22

<211> 34

<212> DNA

<213> Influenza virus

<400> 22

actgcgatga gtggcagggc ggggcgtaat agat 34

<210> 23

<211> 38

<212> DNA

<213> Influenza virus

<400> 23

ctagatctat tacgccccgc cctgccactc atcgcagt 38

<210> 24

<211> 34

<212> DNA

<213> Influenza virus

<400> 24

actgcgatga gtggcagggc ggggcgtaat agat 34

<210> 25

<211> 38

<212> DNA

<213> Influenza virus

<400> 25

ctagatctat tacgccccgc cctgccactc atcgcagt 38

<210> 26

<211> 97

<212> DNA

<213> Influenza virus

<400> 26

ctagacgccc tgcagcaaaa gcagggtgac aaagacataa tggagaaaaa aaatcactgg 60
gtataccacc gttgatatat cccaatcgca tcgtaaa 97

<210> 27

<211> 96

<212> DNA

<213> Influenza virus

<400> 27	
gttcctttacg atgcgattgg gatatatcaa cggtggtata ccagtgatt tttttctcca	60
ttatgtcttt gtcacctgc ttttgctgca gggcgt	96
<210> 28	
<211> 30	
<212> DNA	
<213> Influenza virus	
<400> 28	
cggaattctc ttcgagcgaa agcaggagtt	30
<210> 29	
<211> 51	
<212> DNA	
<213> Influenza virus	
<400> 29	
catgggtgag tttcgaccaa aatctagatt ataaaatagg atacatatgc a	51
<210> 30	
<211> 51	
<212> DNA	
<213> Influenza virus	
<400> 30	
catgggtgag tttcgaccaa aatctagatt ataaaatagg atacatatgc a	51
<210> 31	
<211> 43	
<212> DNA	
<213> Influenza virus	
<400> 31	
aatgtatcct attttataat ctagattttg gtcgaaactc acc	43
<210> 32	
<211> 24	
<212> DNA	
<213> Influenza virus	
<400> 32	
ggccactagt aggtcgacgc cggc	24
<210> 33	
<211> 22	
<212> DNA	
<213> Influenza virus	
<400> 33	
gcgctggcca tcttgccagc ca	22
<210> 34	
<211> 17	
<212> DNA	
<213> Influenza virus	
<400> 34	
agaaaaaat cactggg	17

<210> 35
 <211> 17
 <212> DNA
 <213> Influenza virus

 <400> 35
 ttacgccccg ccctgcc 17

 <210> 36

 <211> 23
 <212> DNA
 <213> Influenza virus

 <400> 36
 gcgcacgat aggtcgacgc cgg 23

 <210> 37
 <211> 55
 <212> DNA
 <213> Influenza virus

 <400> 37
 ggccatcgat ccaatgggta ttattttctg gtttgattc atcttgccag ttggg 55

 <210> 38
 <211> 91
 <212> DNA
 <213> Influenza virus

 <400> 38
 atgactggat ccgctagcat ggccatcatt tatctcattc tctgtttcac agcagtgaga 60
 ggggaccaga tagaagaatc gcaaaaccag c 91

 <210> 39
 <211> 39
 <212> DNA
 <213> Influenza virus

 <400> 39
 atgacagaat tcgtcgactt atctattcac tacagaaag 39

 <210> 40
 <211> 53
 <212> DNA
 <213> Influenza virus

 <400> 40
 gcgcgaagac gcagcaaaag caggagttta agctagcatg gccatcattt atc 53

 <210> 41
 <211> 38
 <212> DNA
 <213> Influenza virus

 <400> 41
 cgatggatcc gctagcttgg aatcgatggg ggtgtatc 38

 <210> 42
 <211> 37
 <212> DNA

<213> Influenza virus

<400> 42
atcgcgatgaat tcgtcgactc agatgcatat tctgcac

37

<210> 43
<211> 51
<212> DNA
<213> Influenza virus

<400> 43
atgactgtcg acccatggaa gtcaatcgat gttatgttaa accaattcca c

51

<210> 44
<211> 28
<212> DNA
<213> Influenza virus

<400> 44
gcgcgaattc tcttcgagca aaagcagg

28

<210> 45
<211> 18
<212> DNA
<213> Influenza virus

<400> 45
agagatgaat tgccgggtt

18

<210> 46
<211> 6
<212> PRT
<213> Influenza virus

<400> 46
Glu Leu Asp Lys Trp Ala
1 5
<210> 47
<211> 12
<212> RNA
<213> Influenza virus

<220>
<221> misc_feature
<222> 9
<223> n = c or u

<400> 47
ccugcuuung cu

12

<210> 48
<211> 22
<212> RNA
<213> Influenza virus

<400> 48
aguagaaaca aggguguuuu uu

22

<210> 49
<211> 52

<212> RNA
 <213> Influenza virus

 <400> 49
 aguagaaaca aggguguuuu uucauaucau uaaacuucac ccugcuuuug cu 52

 <210> 50
 <211> 53
 <212> RNA
 <213> Influenza virus

 <400> 50
 agcaaaagca gggugaagu uaaaugauau gaaaaaacac ccuuguuucu acu 53

 <210> 51
 <211> 30
 <212> RNA
 <213> Influenza virus

 <400> 51
 agaucuauua aacuucaccc ugcuuuugcu 30

 <210> 52
 <211> 43
 <212> RNA
 <213> Influenza virus

 <400> 52
 aguagaaaca aggguguuuu uucagaucau uuacgccccg ccc 43

 <210> 53
 <211> 15
 <212> RNA
 <213> Influenza virus

 <400> 53
 aguagaaaca aggag 15

 <210> 54
 <211> 14
 <212> RNA
 <213> Influenza virus

 <400> 54
 aguagaaaca agag 14

 <210> 55
 <211> 12
 <212> RNA
 <213> Influenza virus

 <400> 55
 ccugcuuucg cu 12

 <210> 56
 <211> 53
 <212> DNA
 <213> Influenza virus

 <400> 56

ccatgggtga gtttcgacca aaatctagat tataaaatag gatacatatg cag 53

<210> 57
 <211> 15
 <212> DNA
 <213> Influenza virus

<400> 57
 cctgcagaag aatga 15

<210> 58
 <211> 55
 <212> RNA
 <213> Influenza virus

<400> 58

gugguauacc cagugauuuu uuucuccauu augucuugu caccugcuu uugcu 55

<210> 59
 <211> 53
 <212> RNA
 <213> Influenza virus

<400> 59
 cugcagaugu auccuauuuu auaaucuagg uuuggucga aggacacca ugg 53

<210> 60
 <211> 12
 <212> RNA
 <213> Influenza virus

<400> 60
 ccugcuuucg cu 12

<210> 61
 <211> 53
 <212> RNA
 <213> Influenza virus

<400> 61
 cugcauugu auccuauuuu auaaucuaga uuuggucga aacucacca ugg 53

<210> 62
 <211> 96
 <212> DNA
 <213> Influenza virus

<400> 62
 ctagacgcc tgcagcaaaa gcagggtgac aaagacataa tggagaaaaa aatcactggg 60
 tataccaccg ttgatatac ccaatcgcat cgtaaa 96

<210> 63
 <211> 42
 <212> DNA
 <213> Influenza virus

<400> 63
 ccaagcttat taaccctcac taaaagtaga aacaaggagt tt 42